## {In Archive} Reservoir Parameters for Goliad Aquifer

Jose Torres to: bknape 12/04/2008 04:41 PM
Cc: Philip Dellinger, Ray Leissner

From: Jose Torres/R6/USEPA/US
To: bknape@tceq.state.tx.us
Cc: Philip Dellinger/R6/USEPA/US@EPA, Ray Leissner/R6/USEPA/US@EPA
History: This message has been replied to.
Archive: This message is being viewed in an archive.

Hello Mr. Ben:

In order to develop an idea of the order of magnitude of the reservoir parameters that might best describe the Goliad aquifer, I would like to ask you if it might be possible for someone in your staff, Ms. Kathryn Flegal perhaps, to make some computer runs using the PRESS2 program.

The objective of the runs is to model the anticipated pressure changes at the listed observation points at the indicated periods of time during the water production operation. The PRESS2 program may require entering the production rate as a negative number in order to compute pressure drawdowns as opposed to pressure increments, as would be the case for fluid injection. The attached image file depicts the results of a pressure drawdown test in the Goliad aquifer in Kleberg County, and might prove helpful in analyzing the computer runs.

I hope you have the opportunity to look at this message prior to our conference call tomorrow, so that we can further discuss the proposed exercise. Have a nice evening.

José Eduardo Torres - 6WQ-SG
(214) 665-8092

Suggested Input Parameters for Requested PRESS2 Run

| | |
|---|---|
| Permeability | 2700 md |
| Porosity | 35% (0.35 Fraction) |
| Compressibility | 19E-06 psi-1 |
| Water SG | 1.05 |
| Water Viscosity | 0.80 cp |
| Formation Thickness | 370 Ft |
| Water Production Rate | 17150 BPD (500 gpm) |
| Formation Volume Factor | 1.0 RBBL/BBL |
| Aquifer Initial Pressure | 301 psi |
| Depth to Middle of Screen | 660 Ft |

| | |
|---|---|
| Radial Distance to Observation Point 1 | 1.0 Ft |
| Radial Distance to Observation Point 2 | 10.0 Ft |
| Radial Distance to Observation Point 3 | 100.0 Ft |
| Radial Distance to Observation Point 4 | 1000.0 Ft |

| | |
|---|---|
| Production Period 1 | 30 Days |
| Production Period 2 | 100 Days |
| Production Period 3 | 365 Days |
| Production Period 4 | 3650 Days |

081203GoliadDrawdownTests_001c.jpg